

Panasonic

Operating Instruction

Colour Television
TX-51P22Z

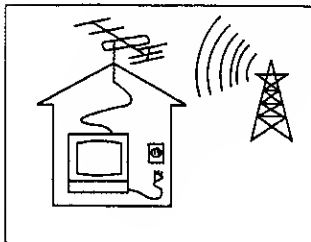
Please read the operating instructions completely before operating this set.

TQB4G0675

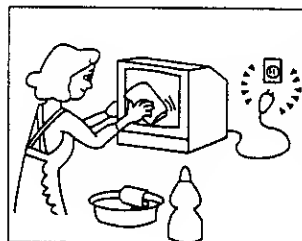
Dear Panasonic customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new colour television.

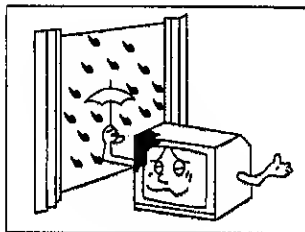
Safety Instructions



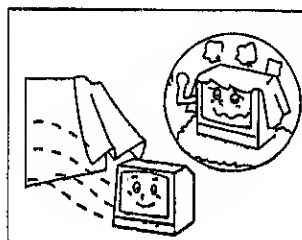
The TV set can be operated on
AC SINGLE 230V, 50Hz



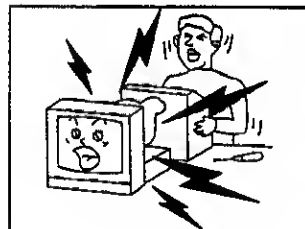
The cabinet and picture tube can be kept in good condition by simply wiping with a clean, soft cloth moistened with mild detergent and water. Do not use solutions containing benzol, petroleum or a chemical cloth. For safety, remove the plug from the wall outlet.



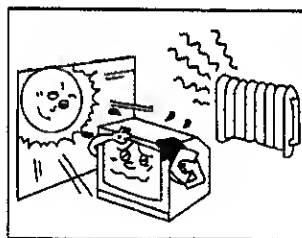
To prevent damage which may result in fire or electrical shock, do not expose the TV set to rain or excessive moisture.



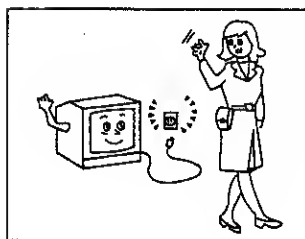
Adequate ventilation is essential to prevent failure of electrical components.



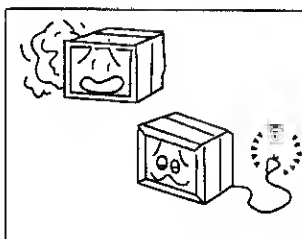
Do not remove the rear cover, as live parts are accessible when it is removed.



Avoid exposing the TV set to direct sunlight and other source of heat.



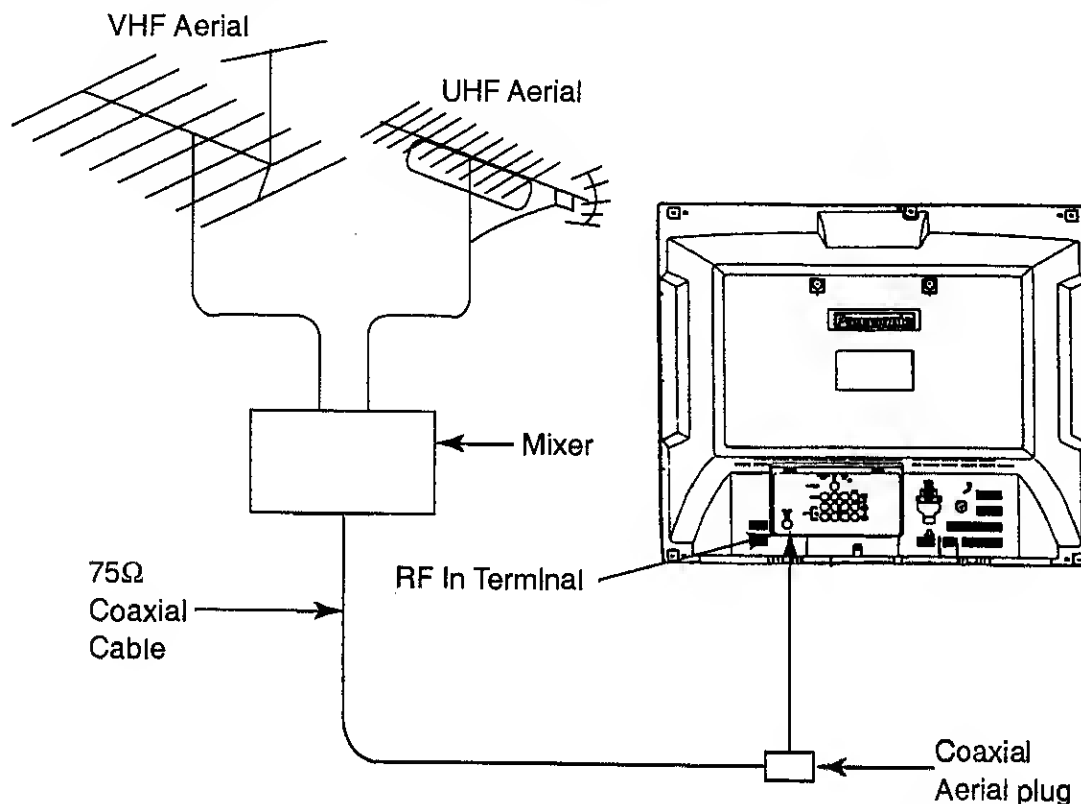
Remove the plug from the wall outlet (Power point) when the TV set is not used for a prolonged period of time.



Do not use this set if abnormal operation occurs.
EX: smoke, odd sounds or smells, turn the power switch off and disconnect the AC power if you notice any unusual operation.

Before Operating This Set

Connect the Aerial Cable to the RF In Terminal



To obtain the best quality picture and sound, an external antenna, the correct cables (75 Ohm coaxial) and the correct terminating plug will be required.

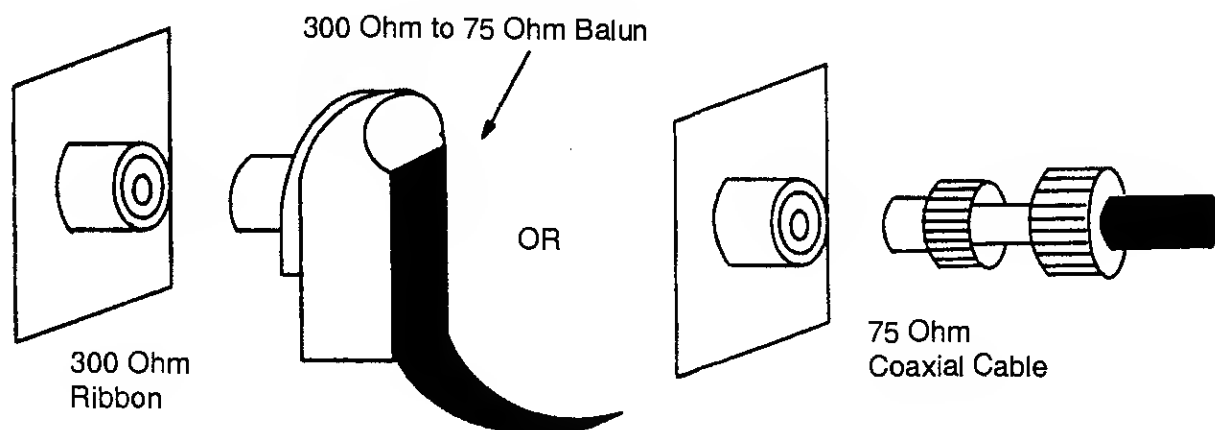
If a communal antenna system is used, you may require the correct connection cable and plugs between the wall antenna socket and your television receiver.

Your local Television Service Dealer may be able to assist you in obtaining the correct antenna system for your particular area and accessories required.

Any matters about antenna installation, upgrading of existing systems or accessories required, and the cost incurred, are the responsibility of the customer.

Note :

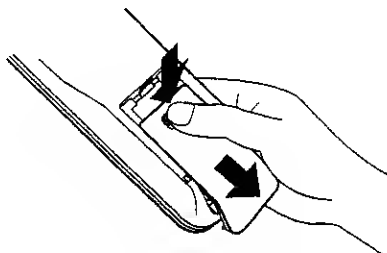
If your existing antenna system uses 300 Ohm to 75 Ohm Balun, see Below.



Before Operating This Set

Battery Installation

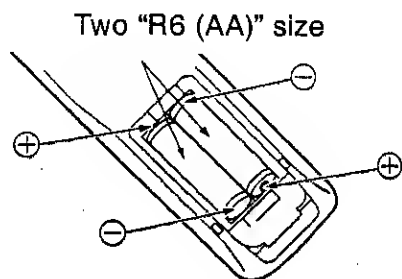
1



Open the cover.

Apply slight downward pressure while pulling towards the bottom.

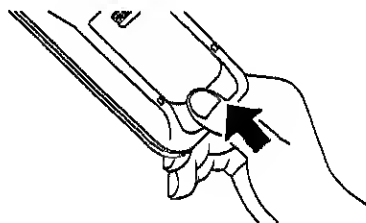
2



Batteries: Use two "R6 (AA)" size batteries.

Insert the batteries ensuring correct polarity. This is identifiable by the "+" and "-" symbols on both the batteries and inside the battery compartment.

3



Replace the cover.

Do not use rechargeable (Ni-Cd) batteries.

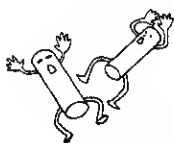
They are different in shape and performance and may fail to ensure correct operation.

Battery cautions

The incorrect use of batteries can cause electrolyte leakage which will corrode the Remote Control or cause the batteries to burst.

Old Batteries

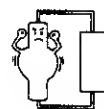
New Batteries



Replacement both batteries at the same time.



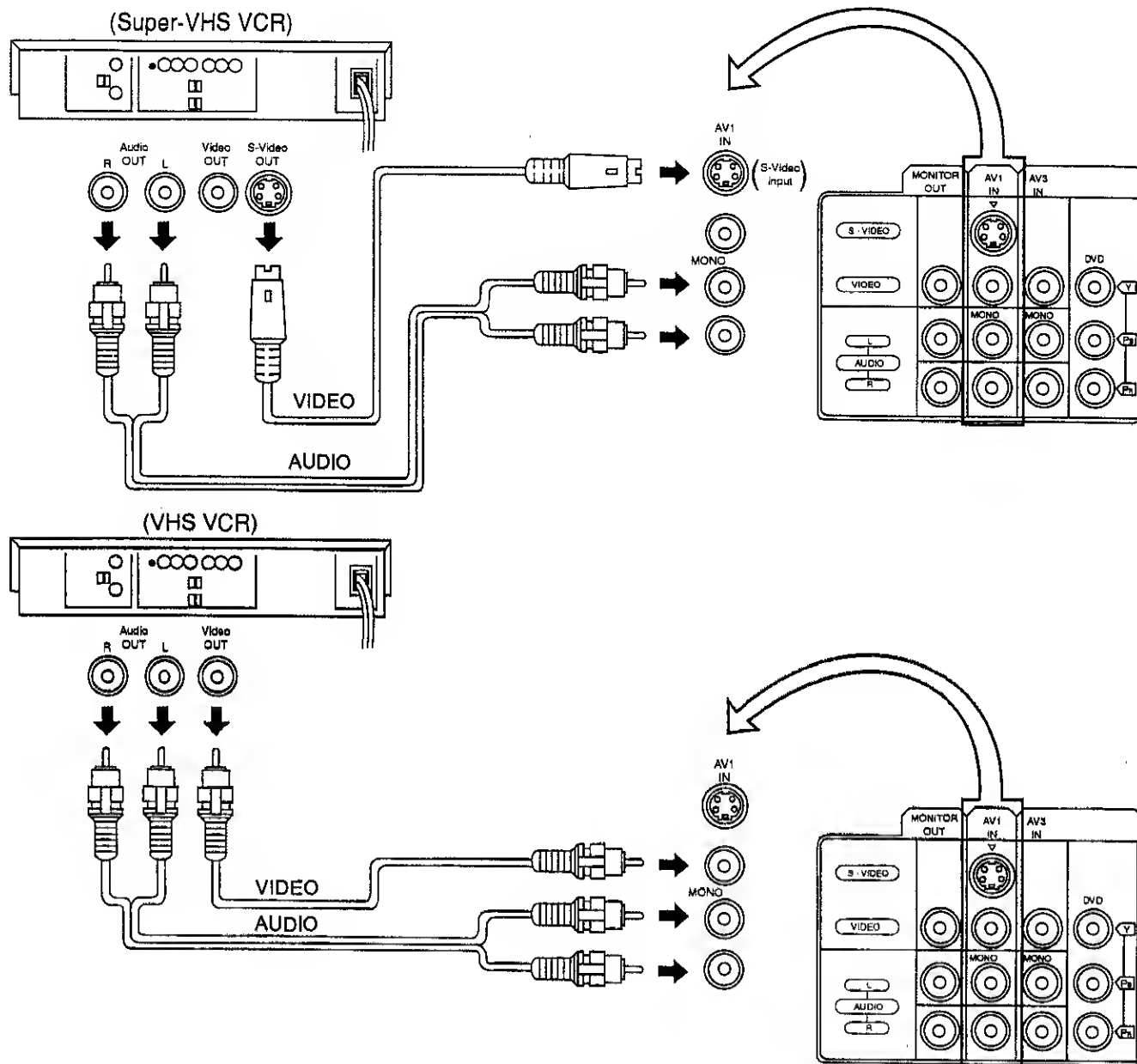
Don't mix battery types
(alkaline with carbon zinc. etc.)



Don't Recharge.

Connections

How to connect the "AV1, AV2 or AV3" Input Terminals

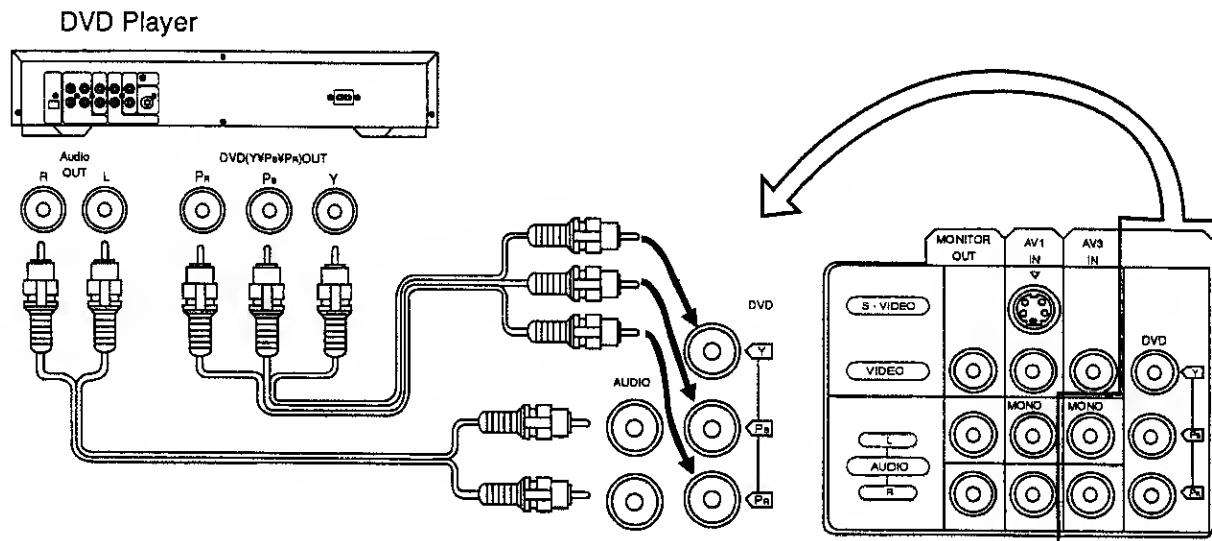


Note:

- (1) When AV 1, AV2 or AV3 is selected, and that AV mode has no input picture signal, the background Colour of the TV screen will change (This only occur if the Blue-Back function is set to the ON condition).
- (2) When an S-Video cable is connected to the S-Video terminal, the Video input will be automatically switched off for the AV mode.
- (3) When a Monaural VCR is used, connect the Monaural Audio cable to the Audio "L" (Left) terminal.
- (4) Similar connections are available at the AV1, AV2 and AV3 input terminals. Select the desired AV input position by pushing the "TV/AV" button.
- (5) The AV3 audio input terminals serves as the audio input terminal for both the video input and for the DVD input.

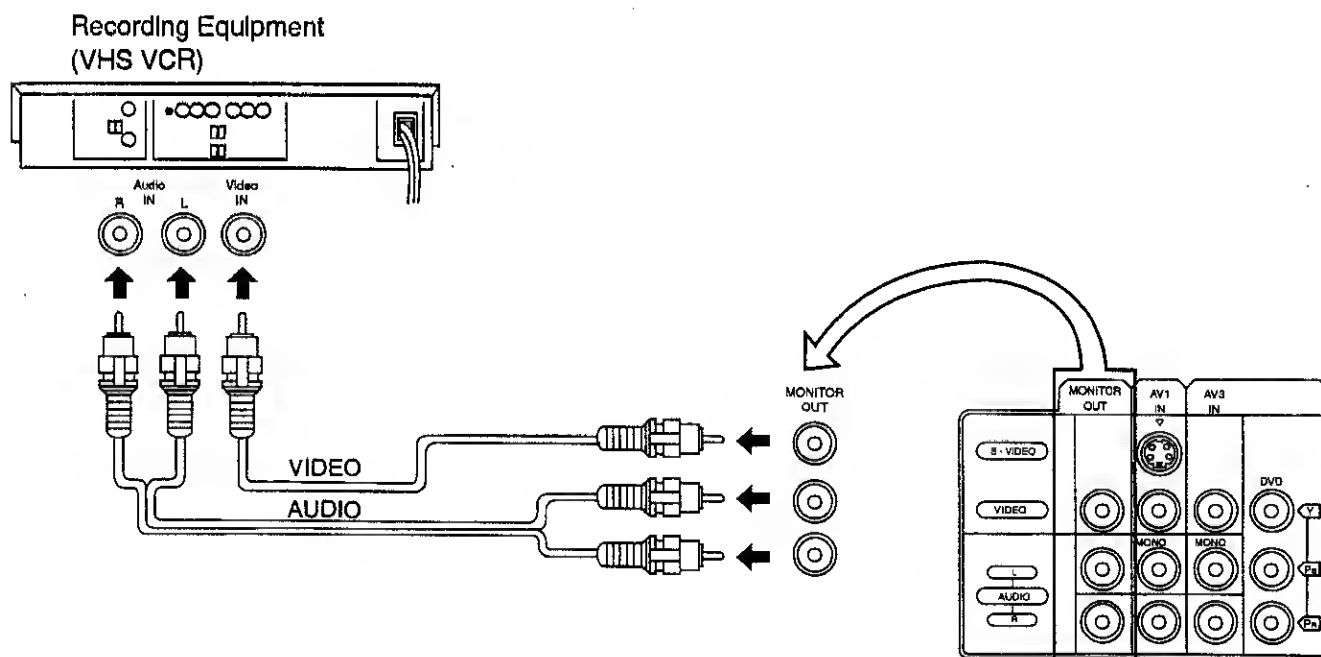
Connections

How to connect the DVD Input Terminals



How to connect the AV Monitor Output Terminals to other Equipment

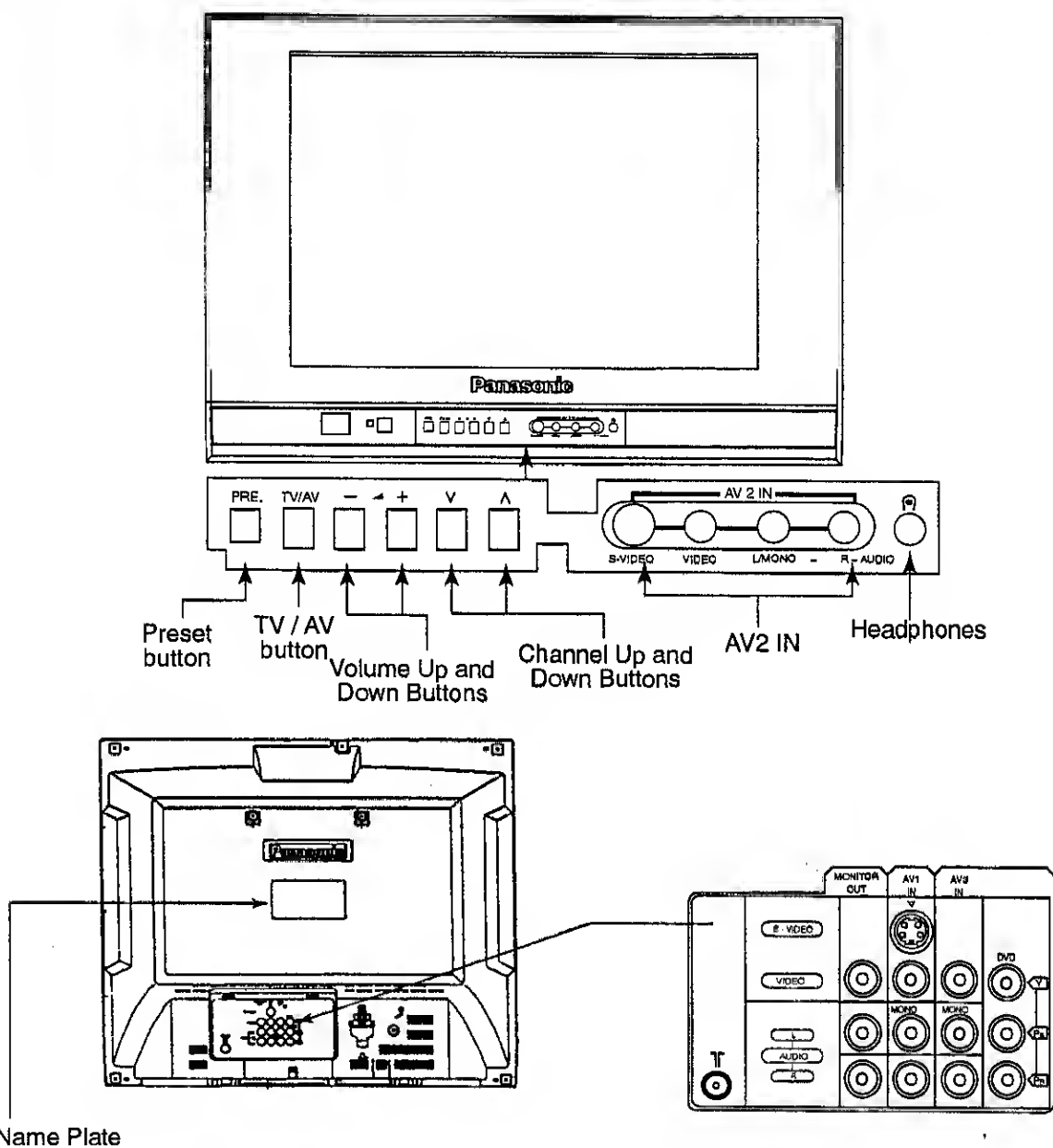
The "Monitor Out" terminal output the same signals as main picture on the TV screen and sound from the speaker at that time. e.g. TV programmes or signals from AV1, AV2 or AV3 input.



Note:

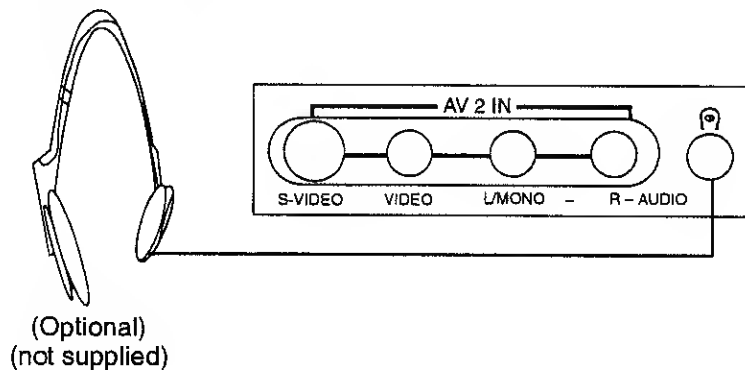
- (1) Never connect the same video recorder with both the VIDEO IN and MONITOR OUT terminals on this TV set, as this could cause incorrect operation.
- (2) The monitor output emits the main picture normal video and audio signals.
- (3) Teletext display on screen will not be output at the MONITOR OUT terminals.
- (4) The DVD signal (Y, Pb, Pr) is not output at the MONITOR out terminals.
- (5) The DVD signal input terminal takes priority over the AV3 video input terminal.

Location of Control (TV)



Connecting Headphones

When a headphones plug is inserted into the Headphones socket all speakers will be automatically disconnected; only the Headphones will function.



Flow Chart of Main Menu

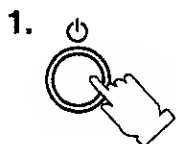
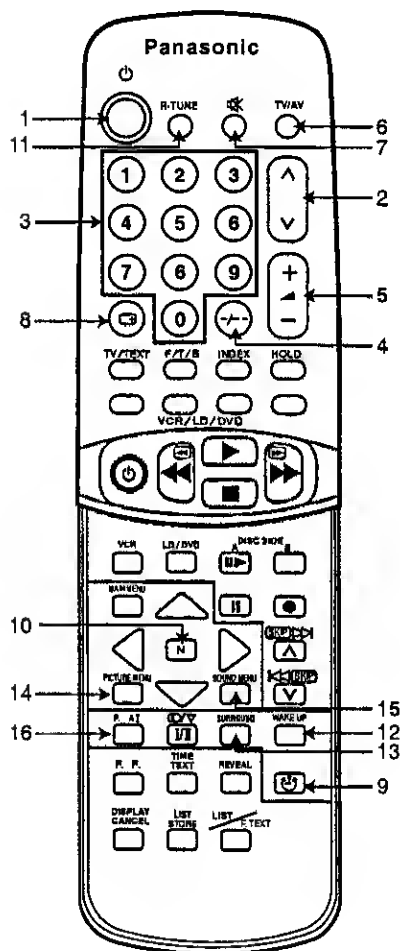
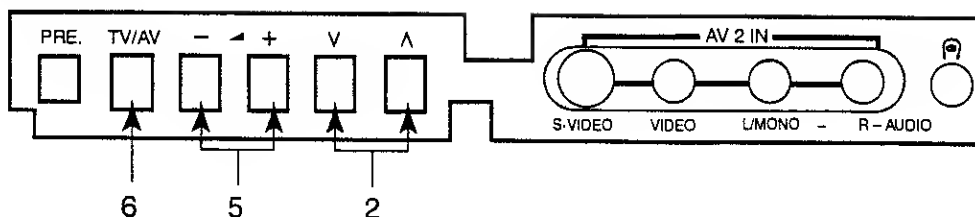
When the "MAIN MENU" button is pushed at the main menu screen, the screen display will return to the normal viewing condition. When the "MAIN MENU" button is pushed at each MENU screen (Picture, Sound, Features, Language, Preset), the screen display will return to the Main Menu screen.

Push					
Select					
Symbol Mark					
On-Screen Indication	PICTURE	SOUND	FEATURES	LANGUAGE ENGLISH 中文 РУССКИЙ العربية	PRESET
Push					
On-Screen Indication (example)	<p>DYNAMIC</p> <p>32 COLOUR</p> <p>32 NTSC-TINT</p> <p>32 BRIGHT</p> <p>63 CONTRAST</p> <p>32 SHARPNESS</p> <p>BTD COLOUR TEMP.</p>	<p>SPEECH</p> <p>28 BASS</p> <p>45 TREBLE</p> <p>32 BALANCE</p> <p>OFF BASS BOOST</p> <p>OFF LOUDNESS</p> <p>OFF AVL</p>	<p>PICTURE AI ON</p> <p>BLUE BACK ON</p> <p>CH COLOUR SET STD</p> <p>CHILD LOCK OFF</p> <p>VCR/GAME OFF</p>	<p>语言</p> <p>ENGLISH</p> <p>中文</p> <p>РУССКИЙ</p> <p>العربية</p>	<p>PRESET</p> <p>AUTO TUNE</p> <p>MANUAL TUNE</p> <p>SOUND SYS 5.5MHz</p> <p>COLOUR SYS AUTO</p> <p>FINE TUNE</p> <p>SKIP OFF</p> <p>POS. CHANGE 00</p>
	<p>DYNAMIC</p> <p>32 COLOUR</p> <p>32 NTSC-TINT</p> <p>32 BRIGHT</p> <p>63 CONTRAST</p> <p>32 SHARPNESS</p> <p>BTD COLOUR TEMP.</p>	<p>SPEECH</p> <p>28 BASS</p> <p>45 TREBLE</p> <p>32 BALANCE</p> <p>OFF BASS BOOST</p> <p>OFF LOUDNESS</p> <p>OFF AVL</p>	<p>PICTURE AI ON</p> <p>BLUE BACK ON</p> <p>CH COLOUR SET STD</p> <p>CHILD LOCK OFF</p> <p>VCR/GAME OFF</p>	<p>ЯЗЫК</p> <p>ENGLISH</p> <p>中文</p> <p>РУССКИЙ</p> <p>العربية</p>	<p>PRESET</p> <p>AUTO TUNE</p> <p>MANUAL TUNE</p> <p>SOUND SYS 5.5MHz</p> <p>COLOUR SYS AUTO</p> <p>FINE TUNE</p> <p>SKIP OFF</p> <p>POS. CHANGE 00</p>
	<p>DYNAMIC</p> <p>32 COLOUR</p> <p>32 NTSC-TINT</p> <p>32 BRIGHT</p> <p>63 CONTRAST</p> <p>32 SHARPNESS</p> <p>STD COLOUR TEMP.</p>	<p>SPEECH</p> <p>28 BASS</p> <p>45 TREBLE</p> <p>32 BALANCE</p> <p>OFF BASS BOOST</p> <p>OFF LOUDNESS</p> <p>OFF AVL</p>	<p>PICTURE AI ON</p> <p>BLUE BACK ON</p> <p>CH COLOUR SET STD</p> <p>CHILD LOCK OFF</p> <p>VCR/GAME OFF</p>	<p>اللغة</p> <p>ENGLISH</p> <p>中文</p> <p>РУССКИЙ</p> <p>العربية</p>	<p>PRESET</p> <p>AUTO TUNE</p> <p>MANUAL TUNE</p> <p>SOUND SYS 5.5MHz</p> <p>COLOUR SYS AUTO</p> <p>FINE TUNE</p> <p>SKIP OFF</p> <p>POS. CHANGE 00</p>
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Note :

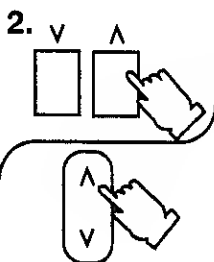
The menu screen function of Bright, Contrast, Bass, Treble, Balance, Bass Boost, Loudness, AVL, Picture AI, Blue Back, CH Colour Set, VCR/Game, Language and Fine Tune are applicable in teletext mode.

General Operation



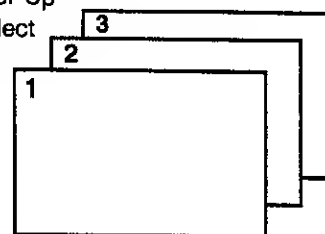
To Switch Power on/off

The TV set must be switched on at the wall outlet and at the Main power switch. Press this button to turn the TV set ON, from stand-by mode. Press it again to turn off.



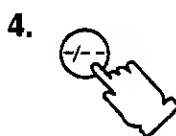
Programme Number Selection

Press the programme number Up "▲" or down "▼" Button to select the next higher or lower programme number.



Direct Programme Number Selection (0 - 9)

e. g. To select programme number "1", press the "1" button.



Two Digit Programme Number Selection

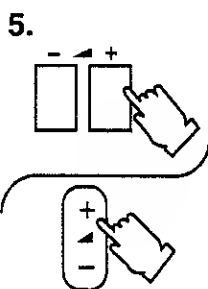
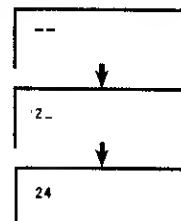
e.g. To select Programme Number "24".

Push the \oplus button.

Push the $\textcircled{2}$ button.

Push the $\textcircled{4}$ button.

Setting range 0 ~ 99



Volume Adjustment

Push the Volume Up or Down button to increase or decrease the sound volume level.

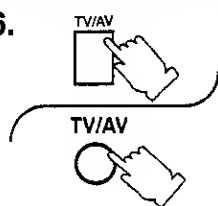
Note :

The on screen display will indicate both numerically and graphically the volume level. Numeric levels start at "0" for zero or no sound, and will increase up to 63 which is the maximum sound level.



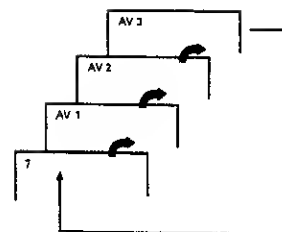
General Operation

6.

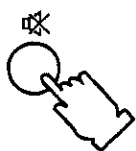


TV / AV Selection

Push the "TV/AV" button to select TV, AV1, AV2 and AV3 input signal modes sequentially.

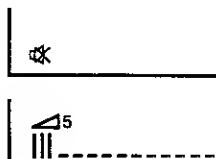


7.



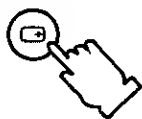
Sound Mute Button

Push this button to mute the Sound completely.
Push the button once again to restore the previous sound level, and cancel the mute.



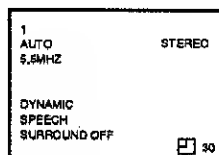
The "Mute" symbol will appear.
(Colour changes to red)

8.



Recall Button

Push the RECALL button to display the current system status.
Press this button until display is cancelled.

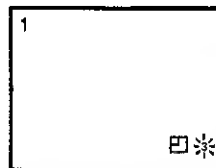
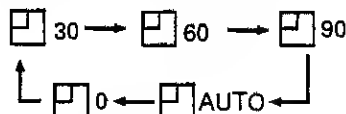


9.



Off Timer Button

The TV set may be preset to switch to stand-by after a fixed period.
By pressing "Off-Timer" button, you can select the preset time either 30, 60, or 90 minutes.



When the off-timer reaches its last 3 minutes, it starts blinking before going to stand-by condition.

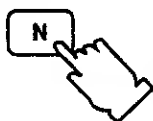
Note :

Setting Off-timer to AUTO mode. If the set is not switched off, when the TV station ends broadcasting, it will automatically go to the stand-by condition after 5 minutes. This AUTO mode will not operate when the TV receiver is in AV mode.

How to cancel the OFF-timer setting:

1. Set the preset time condition to "0" mode by pressing the Off-timer button.
2. Turning the TV set off.

10.



Normal (N) Button

By pushing the Normal "N" Button on the Remote Control while Picture or Sound Control Function is displayed, the Selected function will be changed to the Normal Mode. Normalization will not occur if the function is not displayed when the "N" button is pushed. The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

11.

R-TUNE



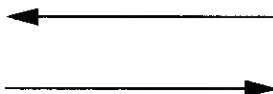
Rapid Tune Button

Push the button to access previously viewed channel.

PRESENT CHANNEL
BEING VIEWED



LAST VIEWED
CHANNEL



General Operation

12 Wake Up Timer Button

1. Press the " WAKE UP TIMER" button.



2. Press the position left or right button to select the wake up timer. (Wake up timer will increase or decrease by 10 minutes when left or right button is pressed.)

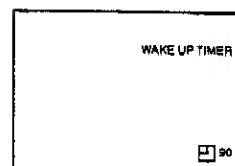
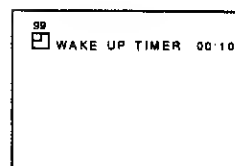
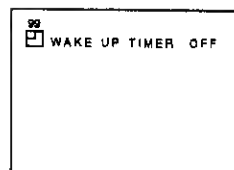
Note :

Wake up time can be set up to 12 hours.

3. After setting the wake up timer, switch the TV set to stand-by mode. (LED light will blink ON and OFF during stand-by mode)
4. When the time Wake Up timer has elapsed in the set will automatically switch on. (Press any button to cancel the wake up timer on screen display.)

Note :

- After the wake up time is set and the TV mode is still not switched off, the wake up timer will continue to count down until the timer is off.
 - When wake up timer switch ON the TV set, the off timer is set to 90 minutes mode automatically. Press any button to cancel the off-timer. If no button is pressed, the TV set will switch off automatically after 90 minutes.
- To cancel the wake up timer.
You can choose any of the following:
 - Switch off the main power.
 - Press the position left or right button, until OFF is reached.
 - Press the Normalize button when wake up timer OSD is displayed.



13. Surround Sound Operation

The benefit of surround sound are enormous. With additional speakers you can be completely enveloped in sound; just as if you were at a concert hall or cinema.

The surround effect does operate without external surround speakers, but is enhanced when they are connected. Such near surround speakers should not be sited in direct proximity to the listeners.



On-screen display during surround mode.

	Type of broadcast	ON-Screen display
TV Mode	MONO	MONO SURROUND ↕ SURROUND OFF
	STEREO	STEREO SURROUND ↕ SURROUND OFF
AV Mode	Select AV mode	STEREO SURROUND ↓ MONO SURROUND ↓ SURROUND OFF

General Operation

14.

PICTURE MENU



Picture Menu Operation

By pressing the PICTURE MENU button, you can sequentially select the Picture menus as shown below:

On-screen	Function
DYNAMIC	For watching in brighter environments. This menu selects a higher than normal level of contrast.
STANDARD	For watching in normal (evening) environments. This menu selects normal level of contrast.
SOFT	For watching in dark environments. This menu selects reduced level of contrast.

15.

SOUND MENU



Sound Menu Operation

By pressing the SOUND MENU button, you can sequentially select the Sound menus as shown below:

On-screen	Function
MUSIC	For music programme for example.
SPEECH	For News programme for example.
MOVIE	For movie programme for example.

16.

P. AI



Picture AI Mode

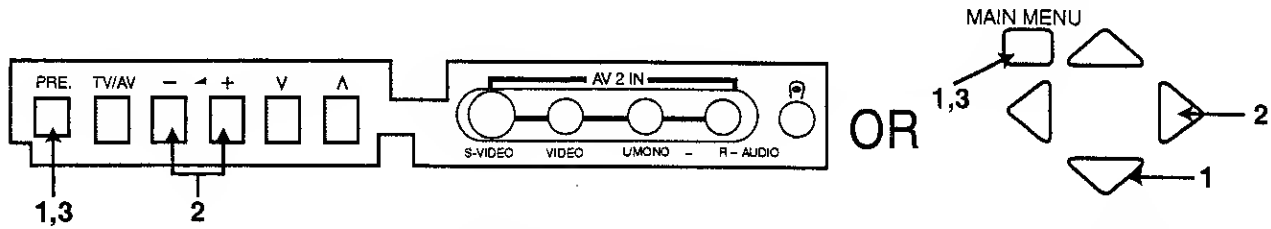
The Picture AI continuously detects fine differences in the picture signal, with great precision, and including the picture brightness, contrast and etc.

The function automatically adjusts the picture to the best quality for the scene, and reproduces images that provide a sense of depth. The Picture AI Mode will change as shown.

ON ↔ OFF

Tuning Procedure

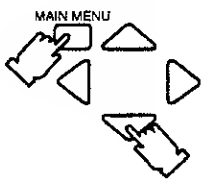
Automatic Tune



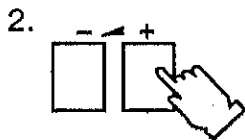
Press the "PRE." (PRESET) button, until "AUTO TUNE" function is selected.

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

Channel Number Automatic Tune condition.



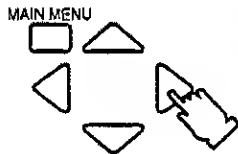
Press the "MAIN MENU" and "Position" buttons, until "AUTO TUNE" function is selected.



Press the Volume Up "+" button.

1	
AUTO TUNE	

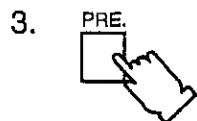
Search start.



Press the Position Right button.

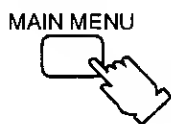
1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

The best tuning position is automatically memorized.



Press the "PRE." (PRESET) button 7 times.

This returns the set to the normal viewing condition.

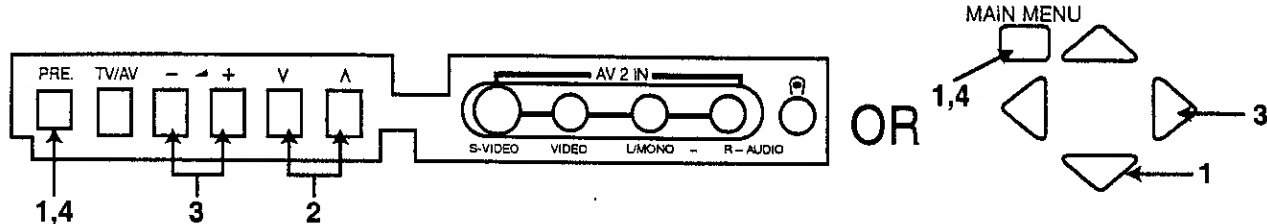


After all stations are tuned, press the "MAIN MENU" button twice.

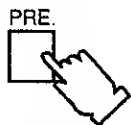


Tuning Procedure

Manual Tune



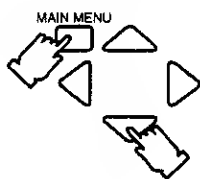
1. Press the "PRE." (PRESET) button twice, setting the Manual Tune mode.



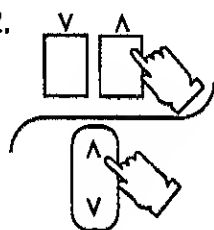
1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

Channel Number
Manual Tune condition.

2. Press the "MAIN MENU" and "Position" buttons, until "MANUAL TUNE" function is selected.



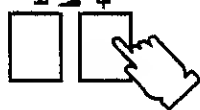
3. Press either the Channel Up or Down button.



2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	2

Select the desired
Channel Number.

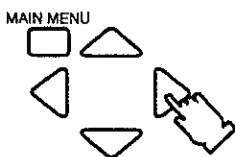
3. Press the Volume Up "+" or Down "-" button.
Volume "+" : Next higher Channel
Volume "-" : Next lower Channel



2	
MANUAL TUNE	

Search Start.

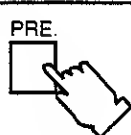
4. Press the Position Left or Right button.
Position left : Next lower Channel.
Position right : Next higher Channel.



2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	2

The best tuning position is
automatically memorized.

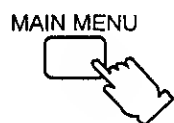
4. Press the "PRE." (PRESET) button 6 times.



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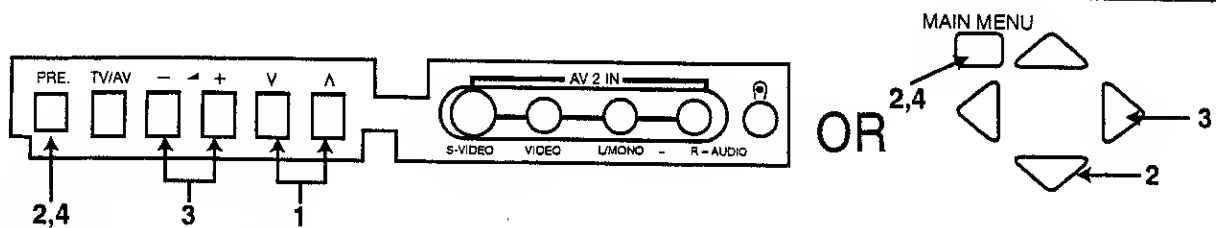
This returns the set to the
normal viewing condition.

5. Press the "MAIN MENU" button twice.



Tuning Procedure

Fine Tune



Under normal reception condition, this function is not used. However, in areas of poor reception or constant interference, a slight adjustment on the fine tuning can improve the picture and sound quality.

- Select the channel which you want to try to improve, using the Channel Up or Down buttons.

Select the desired Channel Number.

- Press the "PRE." (PRESET) buttons 5 times, setting the Preset Menu to "Fine Tune".

Fine Tune condition.

-
- Press the "MAIN MENU" and "Position" buttons, until "FINE TUNE" is selected.

- Press the Volume Up "+" or Down "-" button until the clear picture is received.

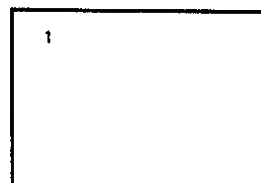
Fine Tune Start.

-
- Press the Position Left or Right button until the clear picture is received.
-
- The AFC (Automatic Frequency Control) function is deactivated. The "■" symbol appears to the left of the Channel Number.

- Press the "PRE." (PRESET) button 3 times.

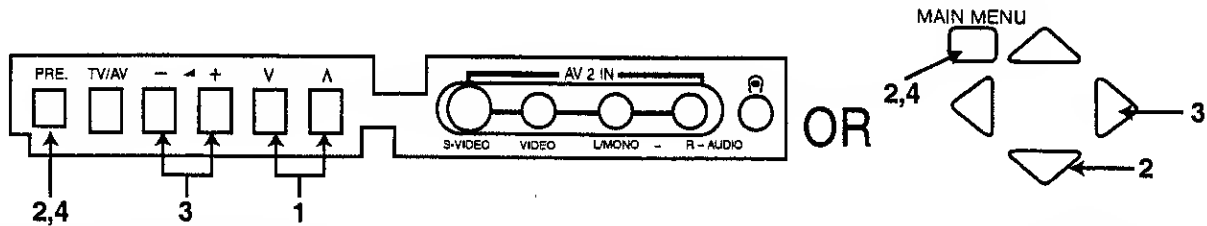
This returns the set to the normal viewing condition.

-
- After all stations are tuned, press the "MAIN MENU" button twice.

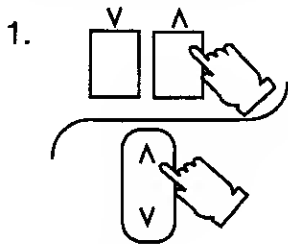


Tuning Procedure

How to cancel the Fine Tuning



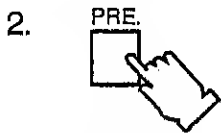
Cancelling previously adjusted (manually) fine tuning, means re – activating the AFC (Automatic Frequency Control) Function, also known as AFT (Automatic Frequency Tuning). Re – activating the Automatic Frequency Tuning means allowing the set to automatically tune optimum tuning position, for that Channel Number.



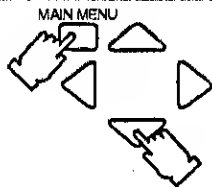
1. Select the "AFC OFF" Channel Number which you want to return to Automatic Frequency Control (Cancel the manual fine tuning).

1

"AFC OFF" Channel Numbers are indicated to you by the "■" symbol to the left of the Channel Number.



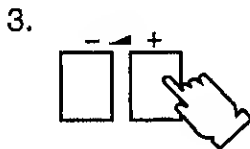
2. Press the "PRE." (PRESET) buttons twice, setting the Preset Menu to "MANUAL TUNE" mode.



Press the "MAIN MENU" and "Position" buttons, until "MANUAL TUNE" function is selected.

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

Manual Tune condition.

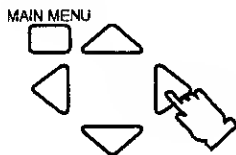


3. Press the Volume Up "+" or Down "-" button briefly.

1

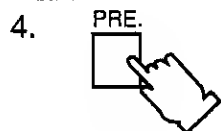
MANUAL TUNE

The best tuning position is automatically memorized.



Press the Position Left or Right button briefly.

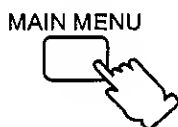
1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1



4. Press the "PRE." (PRESET) button 6 times.

1

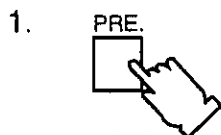
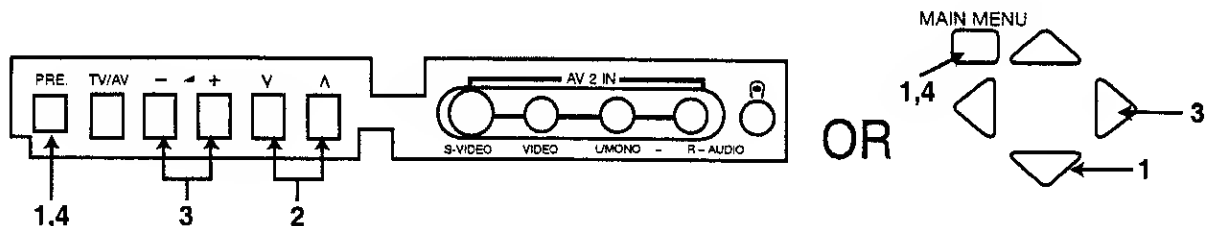
This returns the set to the normal viewing condition.



Press the "MAIN MENU" button twice.

Tuning Procedure

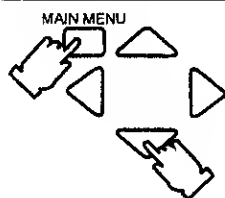
How to Skip Programme Number



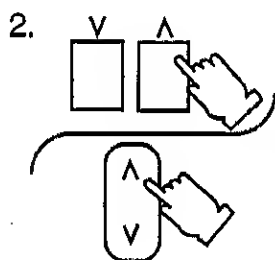
Press the "PRE." (PRESET) button 6 times, setting the Preset Menu to "SKIP".

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

Channel Skip condition.

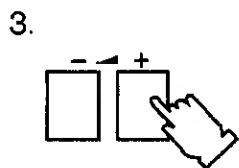


Press the "MAIN MENU" and "Position" buttons, until the Preset Menu to "SKIP".



Select a Programme Number you want to skip, by pushing the Channel number Up or Down buttons.

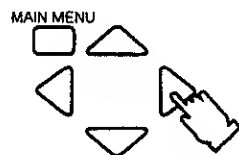
2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	2



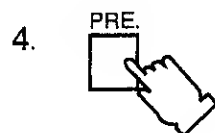
Press the Volume Up "+" or Down "-" button.

2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	ON
POS. CHANGE	2

The displayed "OFF" condition changes to "ON".

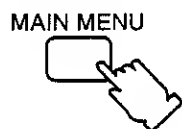


Press the Position Left or Right button.



Press the "PRE." button 2 times.

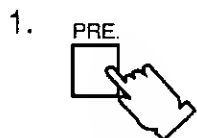
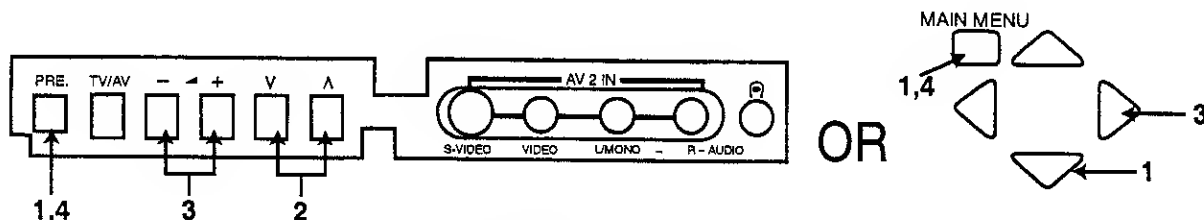
This returns the set to the normal viewing condition.



Press the "MAIN MENU" button twice.

Tuning Procedure

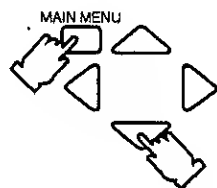
How to Cancel the Skip Function



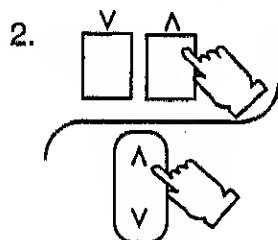
Press the "PRE." (PRESET) buttons 6 times, setting the Preset Menu to "SKIP".

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

Channel Skip condition.

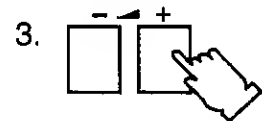


Press the "MAIN MENU" and "Position" buttons, until "SKIP" is selected.



Select the skipped Programme Number, by pressing the Channel Number Up or Down buttons.

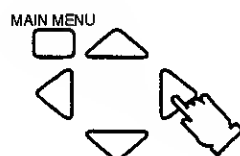
2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	ON
POS. CHANGE	2



Press the Volume Up "+" or Down "-" button.

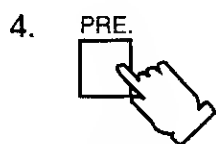
2	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	2

The displayed "ON" condition changes to "OFF".



Press the Position Left or Right button.

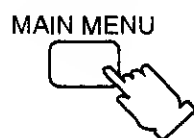
Repeat step 2 and 3, if you wish to cancel the Skip function on any other programme number.



After the Skip Cancel operation is completed, press the "PRE." button 2 times.

2	
---	--

This returns the set to the normal viewing condition.

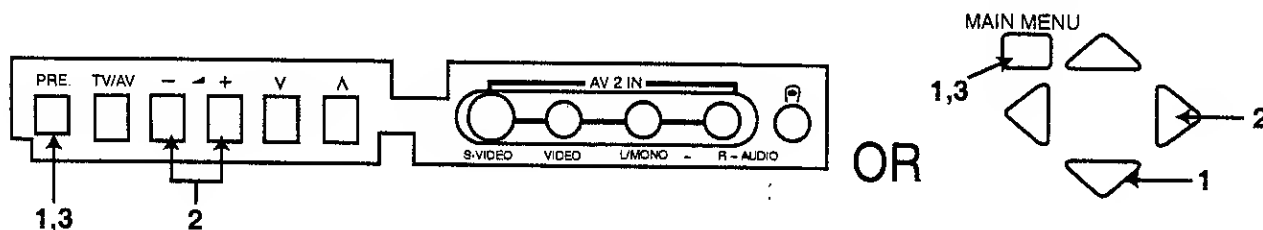


After the Skip Cancel Operation is completed, press the "MAIN MENU" button twice.

Tuning Procedure

Colour System Selection

Use this function if a clear picture with weak colour is obtained when a Broadcast or AV signal is received.

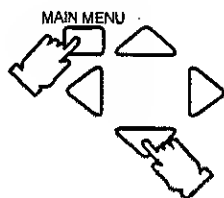


1. PRE.



Press the "PRE." (PRESET) button 4 times.

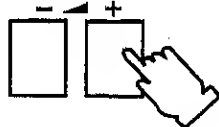
Colour System condition.



Press the "MAIN MENU" and "Position" buttons, until "COLOUR SYS" is selected.

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

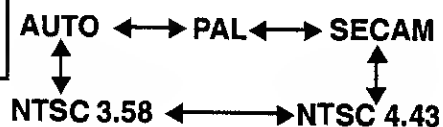
2.



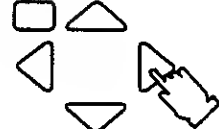
Press the Volume Up "+" or Down button, "-" repeatedly until the optimum image is produced.

1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

The Colour system will change as shown:



MAIN MENU



Press the Position Left or Right button repeatedly until the optimum image is obtained.

3.



Press the "PRE." (PRESET) button 4 times.

This returns the set to the normal viewing condition.

This selected Colour System is automatically memorized.

MAIN MENU

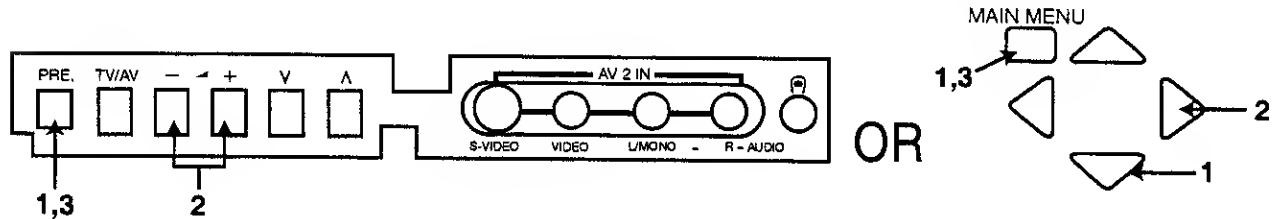



Press the "MAIN MENU" button twice.

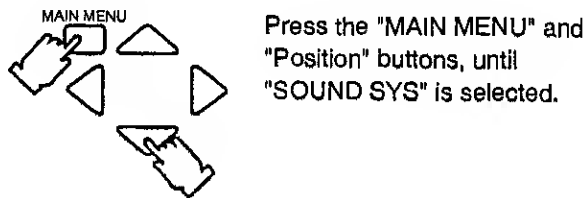
Tuning Procedure

Sound System Selection

This function is used only in the TV mode, and is not applicable in AV mode.
When the sound is not clear or no sound is produced on a channel.




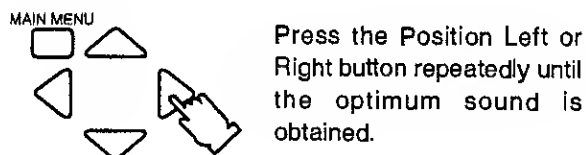
1.  Press the "PRE." (PRESET) button 3 times.



1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

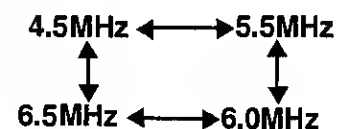
Sound System condition.

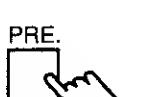
2.  Press the Volume Up "+" or Down button "-" repeatedly until the optimum sound is obtained.

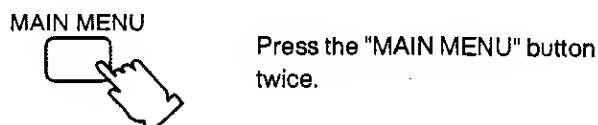


1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

The Sound system will change as shown:



3.  Press the "PRE." (PRESET) button 5 times.



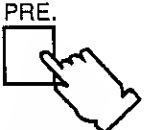
This returns the set to the normal viewing condition.

This selected Sound System is automatically memorized.

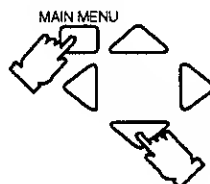
Tuning Procedure

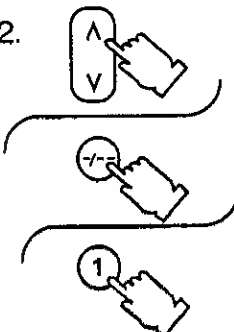
Pos. Change

The position change function is able to shift the present channel to any programme number without doing any tuning process.

1.  Press the "PRE." (PRESET) button 7 times.

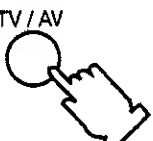
1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	1

-  Press the "MAIN MENU" and "Position" buttons, until "POS. CHANGE" is selected.

2.  Select a Programme number you want to change by pushing either channel UP or DOWN button, two digit programme selection or Direct Programme number selection on the remote control.


1	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	ON
POS. CHANGE	12

Note:
Position change also can operated using panel key. Use PRESET key to enter POSITION CHANGE, then, use volume up/down to change the channel to be swapped to. Use TV/AV to confirm.

3.  Press the "TV/AV" button to confirm.

12	PRESET
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	5.5MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
POS. CHANGE	12




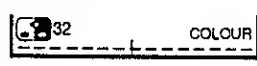



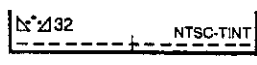



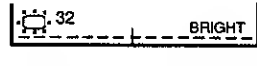



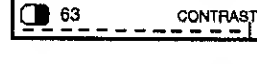



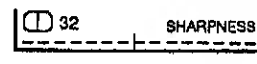



This returns the set to the normal viewing condition.

-  Press the "MAIN MENU" button twice.

Advanced Remote Control Transmitter Operation




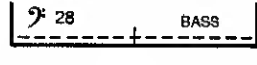







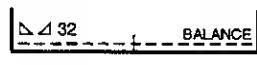









Picture Menu Operation

Picture Menu

Push	Item	Effect	Indicator
 Select	COLOUR	  Less More	
 Select	NTSC-TINT	  Reddish Greenish	
 Select	BRIGHT	  Darker Brighter	
 Select	CONTRAST	  Less More	
 Select	SHARPNESS	  Less More	
 Select	COLOUR TEMP.	  STD ↔ COOL ↔ WARM ↔	COLOUR TEMP.

Sound Menu Operation

Sound Menu

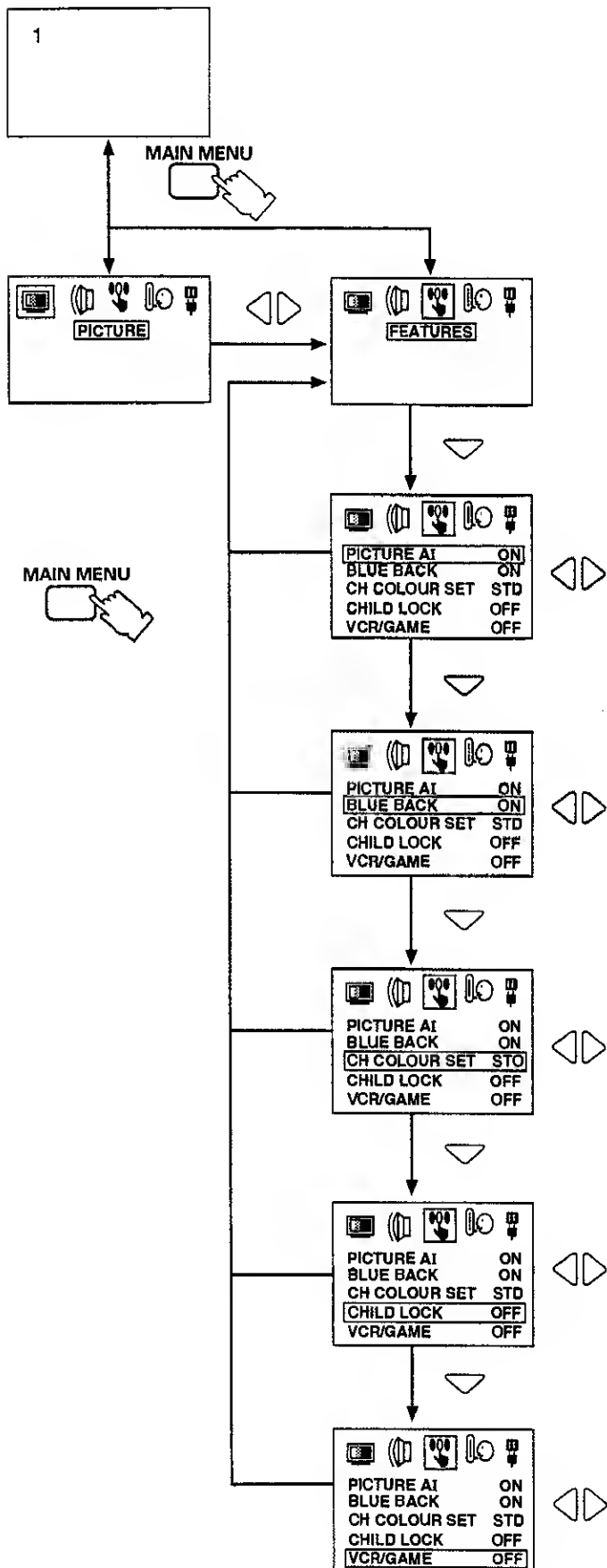
Push	Item	Effect	Indicator
 Select	BASS	  Less More	
 Select	TREBLE	  Less More	
 Select	BALANCE	  Left SP. Right SP.	
 Select	BASS BOOST	  ON ↔ OFF	BASS BOOST
 Select	LOUDNESS	  ON ↔ OFF	LOUDNESS
 Select	AVL	  ON ↔ OFF	AVL

AVL (Auto Volume Limiter)

The AVL function will limit the volume output for music, speech and movie at preset level when it is on.

Advanced Remote Control Transmitter Operation

Features Menu Operation



PICTURE AI mode

The picture AI continuously detects fine differences in the picture signal, which great precision, and including the picture brightness, contrast and etc.

The function Automatically adjusts the picture to the best quality for the scene, and reproduces images that provides a sense of depth. The picture AI mode will change as shown.

ON ↔ OFF

BLUE BACK Mode

When no picture signal is received, or the signal is weak, the screen reverts to a blue background colour and the sound is muted.

Disable this features to continue watching very week signals.



Blue background colour if no input picture signal or input signal is weak.

Note :

If BLUE BACK Mode is set on while a VCR signal is being viewed, selecting CUE or REVIEW may cause the screen to revert to the blue background colour. Disable this feature to view correctly.

CH (Channel) COLOUR SET mode

Colour density varying between broadcast channels can be adjusted to three levels for each reception channel as follows :



CHILD LOCK mode

To child lock any channel, press the position left or right button.

- 1) When channel is "LOCK", sound is muted and screen becomes blue colour.
- 2) If any of the channels is CHILD LOCK, then preset key at any panel will not work. If preset key (Penel) is pressed, message "CHILD LOCK ON" will appear.
- 3) Main power ON in child locked channel will display "CHILD LOCK ON" on screen to remind user that the Child lock is On and is in Child locked channel.
- 4) Each channel has its own memory for channels to be child locked.

VCR/Game mode

Reproduction of irregular signals, such as TV games and rental video tapes, may be improved.

The VCR/GAME mode will change as shown.

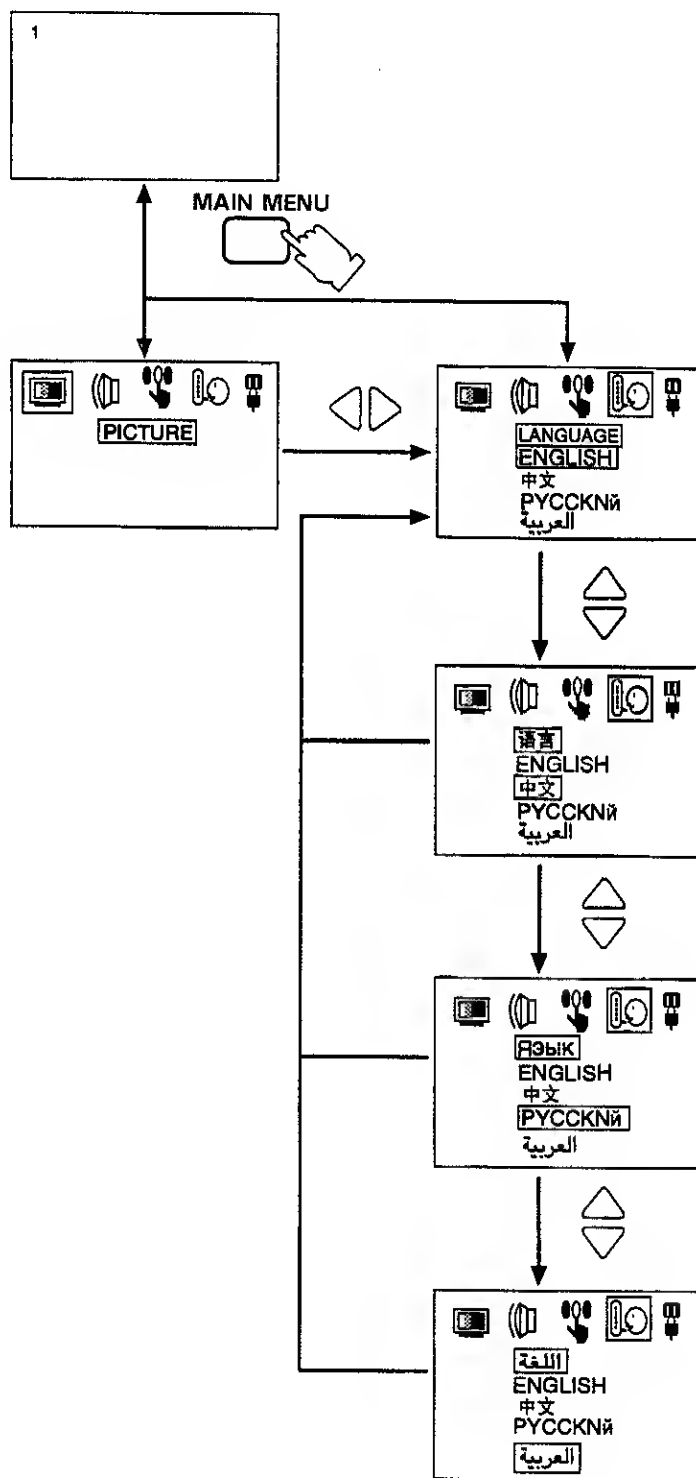
ON ↔ OFF

Advanced Remote Control Transmitter Operation

Language Menu Operation

Language Menu

Press the "Position Up or Down" button. The on-screen language display will change as follows :



Advanced Remote Control Transmitter Operation

1. Stereo Reception



Stereo / Bilingual Sound Selection Button

Sound output modes can be selected by pressing the "Sound Selection" Button.
STEREO, BILINGUAL (if transmitted) and MONO modes can be selected using this button.

	Types of Broadcast	On-screen Indication	Remarks
NICAM Digital Stereo	Regular Broadcast (Standard Audio)		Normal use
	Regular + NICAM MONO I [MAIN <I>]		You can select either the "MAIN <I>" or "MONO" audio signal
	NICAM STEREO		You select either the "STEREO" or "MONO" mode.
	NICAM DUAL MONO MAIN <I> / SUB <II>		You can select either the "MAIN <I>", "SUB <II>" or "MONO".
A2 (German) Stereo	Regular Broadcast (Standard Audio)		Normal use
	BILINGUAL or DUAL MONO MAIN <I> / SUB <II>		You can select either the "MAIN <I>" or "SUB <II>" audio signal.
	STEREO		You can select either the "STEREO" or "MONO" mode.

Teletext Operation

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- When in teletext mode, the volume may still be altered to the desired listening level.

What Is LIST mode?

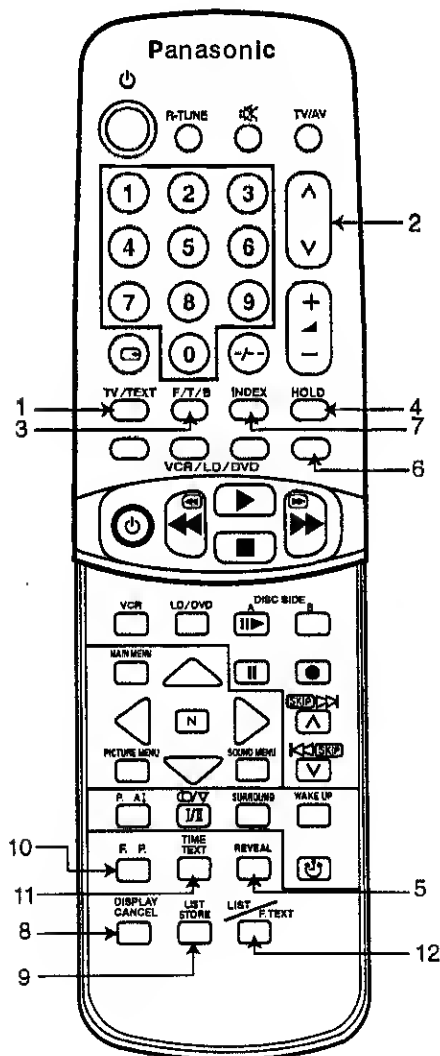
In LIST mode, four different coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

What is FASTEXT?

In FASTEXT mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, push the appropriately coloured button. This facility enables fast access to information of the subjects shown.

What are the advantages?

- Page selection at the touch of a Colour-coded Button.
- Easy to use step-by-step selection of the topics subject.
- Reduction of waiting time.
- Page status line at bottom of screen so you always know which button will take you to the desired information.



1. TV/TEXT

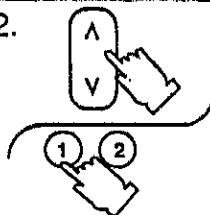


TV/Teletext mode

By pushing the TV/TEXT button, to change the TV/Teletext mode as follows:



2.



Page Selection

Page can be selected in two ways:

- a) Push the Up/Down Buttons to increase or decrease the page number by one.
- b) By entering the page number, using 0 ~ 9 on the remote control.

3. F/T/B



Full/Top/Bottom

Push to expand the Top of the page.
Push again to expand the Bottom half.
Push again to return to normal (Full) size.

4. HOLD



Hold

Push to hold the current page.
Push again to cancel the hold.

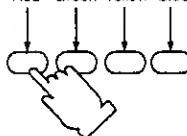
5. REVEAL



Reveal

Push to reveal hidden words.
e.g. quiz page answer.
Push again to hide.

6. Red Green Yellow Light Blue



Colour-coded buttons

In Fastext mode these correspond to the differently coloured subjects.

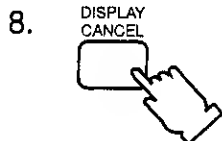
7. INDEX



Index

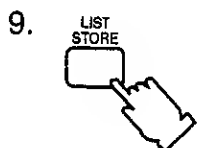
Push INDEX to return to the main index page.

Teletext Operation



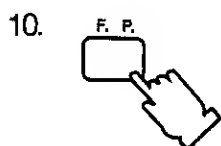
Display Cancel

Press the "DISPLAY CANCEL" button to view the normal TV programme.
When the desired sub-page is received, the "TEXT" message appears at the top left of the screen.



List Store

In LIST mode, the four page numbers can be altered for channel position. To do this, push one of the colour-coded buttons and enter the new page number.
Press and hold list store, the page number will change colour.

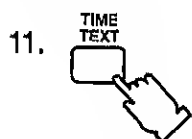


Favourite Page (F.P.)

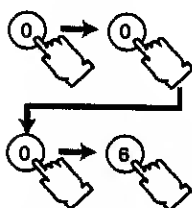
Stores a favourite page in memory for instant recall. To store such a page, the TV must be in LIST mode, push the Light Blue button, select the page number, then push List Store. The page number is now stored.
Press F.P. button to recall this page.

Sub Coded Page Access

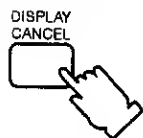
The TEXT Menu will be displayed in TEXT mode. When teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. It is possible to enter your required sub page and continue watching the normal programme until the correct sub page is found. Select the required page number using buttons 0-9.



Press the TIME TEXT button.



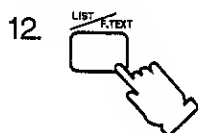
Enter desired sub page number.
To select page 6 enter 0,0,0 and 6.



Press the DISPLAY CANCEL button to view a normal TV programme.



When the page is available, press the TV/TEXT button twice to view the sub page.



List/F.Text

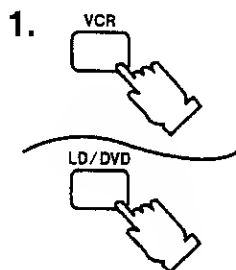
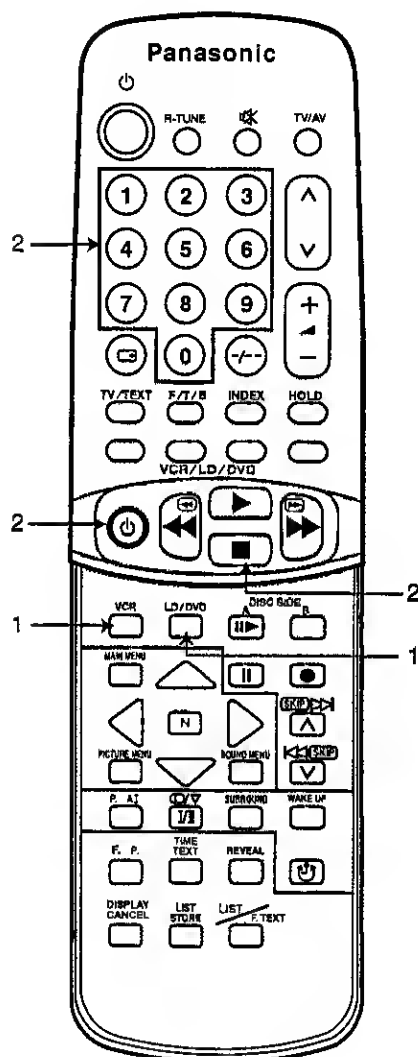
Press to change from FASTEXT mode to LIST mode and vice versa. In FASTEXT mode four differently coloured subjects are displayed at the bottom of the page.
Press the appropriate coloured button to access more information about one of these subjects.

Operation of the VCR / LD / DVD

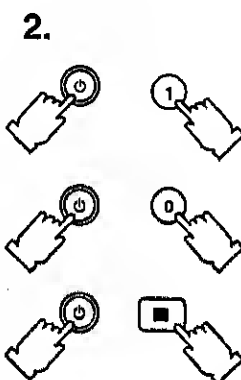
Manufacturer setting

Remote Control Operation is possible for the VCR's, LD's and DVD's of the various manufacturers.

After completion of setting, execute the various operations after pushing the VCR or the LD/DVD button.



1. Press the button of the unit to be set (VCR or LD/DVD).



2. While pressing the VCR/LD/DVD Power button, press the manufacturer code setting (enter the two digit code), and press the VCR/LD/DVD Stop button.

VCR

Manufacturer	Code	Manufacturer	Code
Panasonic/ National	10, 11, 12, 13	NEC ORION	40, 41, 42, 43 45, 46
AIWA	15, 16	PHILIPS	50
FUJITSU	20	SANYO	55, 56, 57, 58
HITACHI	25, 26, 27	SHARP	60, 61
JVC	30, 31, 32	SONY	65, 66, 67
MITSUBISHI	35, 36	TOSHIBA	70, 71

LD

Manufacturer	Code	Manufacturer	Code
Panasonic	10, 11, 12, 13	SAMSUNG	30
KENWOOD	15, 16	SHARP	35
PHILIPS	20	SONY	40, 41, 42, 43
PIONEER	25		

DVD

Manufacturer	Code
Panasonic	70

Note:

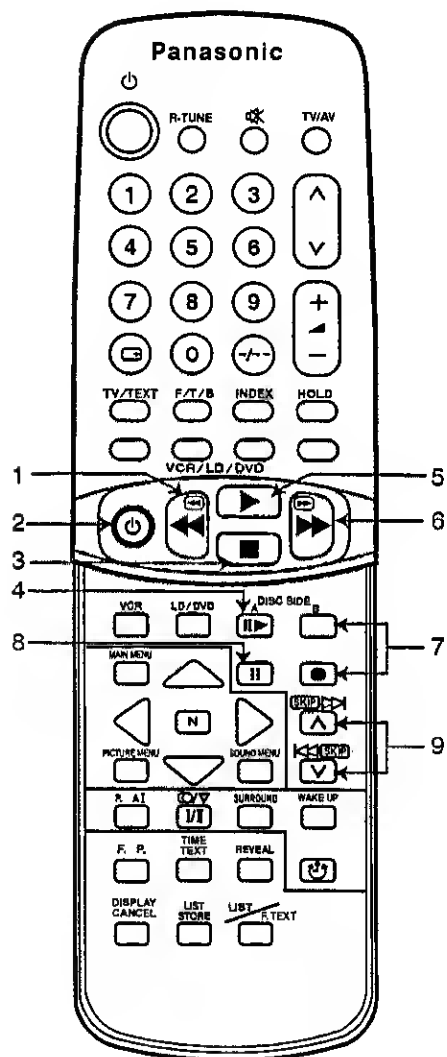
After setting, execute operation confirmation.
If there is no operation, set a different code.










Helpful Hint

- (1) The respective VCR/LD/DVD manufacturer code is cancelled when battery has been exchanged. Please set it again.
- (2) Depending on the model, operation of VCR's, LD's or DVD's of the manufacturers listed above may not be possible.
- (3) In some cases, new products may not be operative.
- (4) It will not operate with other than the above manufacturers.

Operation of the VCR / LD / DVD



















Execute the various operations after pushing the VCR or LD/DVD button.



Button		Function	
		VCR	LD/DVD
1		Rew (Rewind)/ Review Button	Rew (Rewind)/ Review Button
2		VCR Power	LD/DVD Power Button
3		Stop Button	Stop Button
4		Still Advance Button	DISC SIDE A Selection Button
5		Play Button	Play Button
6		FF (Fast Forward)/Cue Button	FF (Fast Forward)/ Cue Button
7		Rec (Record) Button	DISC SIDE B Selection Button
8		Pause/Still Button	Pause/Still Button
9		Programme Number Up and Down Buttons for VCR	Programme Skip Button

Troubleshooting

Before calling for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Checks
Picture	Sound	
 <p>Snowy Picture</p>	 <p>Noisy Sound</p>	<p>Aerial Location, direction Connection</p>
 <p>Multiple Image</p>	 <p>Normal Sound</p>	<p>Aerial Location, direction Connection</p>
 <p>Interference</p>	 <p>Noisy Sound</p>	<p>Electrical Appliances Cars / Motorcycles Fluorescent Lamps</p>
 <p>Normal Picture</p>	 <p>No Sound</p>	<p>Volume (Check whether the mute function has been activated on the Remote Control.)</p>
 <p>No Picture</p>	 <p>No Sound</p>	<p>Not plugged into AC outlet Not switched on Contrast and Brightness / Volume Setting (Check by pushing the Power Switch or Stand-by Button on the Remote Control.)</p>
 <p>No Colour</p>	 <p>Normal Sound</p>	<p>Colour Control</p>
 <p>Scrambled</p>	 <p>Weak Sound</p>	<p>Re-tune Channels</p>
 <p>Colour Patches</p>	 <p>Normal Sound</p>	<p>Magnetic interference from unshielded equipment. Receiver moved while "ON"</p>
 <p>No Colour</p>	 <p>Noisy Sound</p>	<p>Sound System Colour System</p>

Specifications

Power Source : AC SINGLE 230V, 50Hz

Power Consumption : 125 W

Receiving System : 17 SYSTEMS

	SYSTEMS	FUNCTION
1. 2. 3. 4. 5. 6. 7.	PAL B,G,H PAL I PAL D,K SECAM B,G SECAM D, K. SECAM K1 NTSC M (NTSC 3.58 / 4.5MHz)	Reception of broadcast transmissions and playback from video cassette tape recorders.
8. 9. 10. 11. 12. 13. 14.	NTSC 4.43 / 5.5MHz NTSC 4.43 / 6.0MHz NTSC 4.43 / 6.5MHz NTSC 3.58 / 5.5MHz NTSC 3.58 / 6.0MHz NTSC 3.58 / 6.5MHz SECAM I	Playback from special VCR only.
15. 16. 17.	PAL 60Hz / 5.5MHz PAL 60Hz / 6.0MHz PAL 60Hz / 6.5MHz	Playback from special Disc player and VCR only.

Receiving Channels :

VHF BAND	UHF BAND	CATV
2 – 12 PAL / SECAM B,K1 0 – 12 PAL B (AUST.) 1 – 9 PAL B (N.Z.) 1 – 12 PAL / SECAM D 1 – 12 NTSC M (JAPAN) 2 – 13 NTSC M (U.S.A.)	21 – 69 PAL G,H,I / SECAM G,K,K1 28 – 69 PAL B (AUST.) 13 – 57 PAL D,K 13 – 62 NTSC M (JAPAN) 14 – 69 NTSC M (U.S.A.)	S1 – S20 (OSCAR) 1 – 125 (USA CATV) C13 – C49 (JAPAN) S21 – S41 (HYPER) Z1 – Z37 (CHINA) 5A, 9A (AUST.)

Tuning System: Frequency synthesizer Auto search tuning : 100 position.

Picture Tube : 51 cm, measured diagonally, 90° deflection.

Audio Output : 8 W × 2 (Speaker)

Aerial Impedance : 75 Ω Unbalanced coaxial.

Video/audio terminal :	AV 1,2	S-Video In	Y:1 Vp-p, 75 Ω C: 0.3 Vp-p, 75 Ω
	DVD	Y P _B P _R	1.0 Vp-p, 75 Ω 0.7 Vp-p, 75 Ω 0.7 Vp-p, 75 Ω
	AV 1,2,3	Video In Audio In	1 Vp-p, 75 Ω Approx. 0.4V, 47 kΩ
	Monitor Out	Video Out Audio Out	1 Vp-p, 75 Ω Approx. 0.4V, 1 kΩ

Remote Control Transmitter : EUR511033

Battery : R6 (AA) × 2

Dimension (W × D × H) : 550 × 486 × 468 mm

Weight (Net) : 25.5 Kg

Note :

Design and Specifications are subject to change without notice.